UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,199	12/11/2001	Heather N. Bean	100110043-1	4347

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EXAMINER
HANNETT, JAMES M

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/016,199	BEAN ET AL.
	Examiner	Art Unit
	James M. Hannett	2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>30 September 2005</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>44-58</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>44-58</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>11 December 2001</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 44-58 have been considered but are moot in

view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1:      Claims 44-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN

5,790,878 Anderson et al in view of USPN 6,687,839 Tate et al.

2:      As for Claim 44, Anderson teaches on Column 6, Liens 40-64 allowing the device to

operate until a battery failure occurs, the battery failure comprising a condition in which the

battery's charge drops below a level required to operate the device. Anderson teaches on Column

6, Lines 44-48 that the predetermined threshold voltage is set to a level incrementally higher than

the minimum operating voltage to permit shutdown of the camera. Because the camera of

Anderson ceases to work after the threshold voltage is reached, the examiner views the threshold

voltage discussed in Anderson to be the voltage level required to operate the device. Anderson

teaches on Column 7, Lines 58-67 determining, upon an attempt to restart the device after the

battery failure, that the battery has insufficient charge to support further operation of the device.

Anderson further teaches on Column 6, Lines 41-64 disabling further operation of the device

until the battery has been recharged. Anderson teaches on Column 7, Lines 58-67 and Column 8,

Lines 16 that after a power down operation has occurred, if a user attempts to turn on the camera, the camera senses the battery voltage and determines if the voltage is sufficient and stable enough to turn on the camera. Anderson teaches that if the voltage is not high enough, the CPU prevents the camera from fully powering on and returns to Step (828) in Figure 8. This process of returning to a state in which the camera looks for a wake up signal is viewed by the examiner as a process of shutting down the device. However, Anderson does not teach that the CPU uses residual charge recovered during a brief period between the power down operation and the attempt to wake up the camera to perform this operation.

Tate et al teaches in the abstract and on Column 2, Lines 17-30 That it was well known in the art at the time the invention was made that when a load is removed from a battery, the battery regains some voltage. Tate et al further teaches that it is advantageous to use this residual voltage to perform operations and extend battery life.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the (after power down residual charge build up) as taught by Tate et al to perform the process of returning to a state in which the camera looks for a wake up signal in Anderson et al in order to extend the battery life.

3:     In regards to Claim 45, Anderson depicts in Figure 1 and 3 a device, comprising: a battery (358); a circuit to determine a status of the battery (359); a file system (DRAM and 354); and control logic configured to perform a shutdown sequence and prevent further operation of the device, when the status of the battery is unfavorable (Column 6, lines 41-64), and to ensure the integrity of the file system (prevent the loss of data) and startup the device, when the status of the battery is favorable (Column 7, Lines 58-67 and Column 8, Lines 1-33).

4:      As for Claim 46, Anderson teaches that the image memory gets erased when power is not

supplied to it. Furthermore, Anderson is configured to detect if a power failure has occurred and

notifies the camera system when a power failure occurs. However, Anderson does not teach the

method of displaying an error message to a user informing the user that an image file has been

corrupted due to power failure.

Official notice is taken that it was well known in the art at the time the invention was

made to allow computerized file systems to notify users when a file was corrupted by a sudden

power failure and inform the user that un-saved work was lost.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to allow the computerized file system in Anderson to notify the camera user

when a file was corrupted by a sudden power failure in order to inform the user that un-saved

work was lost.

5:      In regards to Claim 47, Anderson depicts in Figure 1 and 3 the device comprises a digital

camera.

6:      As for Claim 48, Anderson teaches the use of a camera system that automatically turns

off the power to a digital camera when the battery voltage drops below a set value. However,

Anderson does not teach that the lens on the digital camera is retracted during the shutdown

sequence.

Official Notice is taken that it was well known in the art at the time the invention was

made to retract the lens of a camera upon shutdown in order to prevent the lens from being

damages when the camera is stored.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to retract the lens of a camera in Anderson upon shutdown in order to

prevent the lens from being damages when the camera is stored.

7:      In regards to Claim 49, Anderson teaches on Column 6, Liens 40-64 allowing the device

to operate until a battery failure occurs, the battery failure comprising a condition in which the

battery's charge drops below a level required to operate the device. Anderson teaches on Column

6, Lines 44-48 that the predetermined threshold voltage is set to a level incrementally higher than

the minimum operating voltage to permit shutdown of the camera. Because the camera of

Anderson ceases to work after the threshold voltage is reached, the examiner views the threshold

voltage discussed in Anderson to be the voltage level required to operate the device. Anderson

teaches on Column 7, Lines 58-67 determining, upon an attempt to restart the device after the

battery failure, that the battery has insufficient charge to support further operation of the device.

Anderson further teaches on Column 6, Lines 41-64 disabling further operation of the device

until the battery has been recharged. Anderson teaches on Column 7, Lines 58-67 and Column 8,

Lines 16 that after a power down operation has occurred, if a user attempts to turn on the camera,

the camera senses the battery voltage and determines if the voltage is sufficient and stable

enough to turn on the camera. Anderson teaches that if the voltage is not high enough, the CPU

prevents the camera from fully powering on and returns to Step (828) in Figure 8. This process

of returning to a state in which the camera looks for a wake up signal is viewed by the examiner

as a process of shutting down the device. However, Anderson does not teach that the CPU uses

residual charge recovered during a brief period between the power down operation and the

attempt to wake up the camera to perform this operation.

Tate et al teaches in the abstract and on Column 2, Lines 17-30 That it was well known in the art at the time the invention was made that when a load is removed from a battery, the battery regains some voltage. Tate et al further teaches that it is advantageous to use this residual voltage to perform operations and extend battery life.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the (after power down residual charge build up) as taught by Tate et al to perform the process of returning to a state in which the camera looks for a wake up signal in Anderson et al in order to extend the battery life.

8:      As for Claim 50, Anderson depicts in Figure 1 and 3 a device, comprising: a battery (358); a circuit to determine a status of the battery (359); a file system (DRAM and 354); and control logic configured to perform a shutdown sequence and prevent further operation of the device, when the status of the battery is unfavorable (Column 6, lines 41-64), and to ensure the integrity of the file system (prevent the loss of data) and startup the device, when the status of the battery is favorable (Column 7, Lines 58-67 and Column 8, Lines 1-33).

9:      In regards to Claim 51, Anderson teaches that the image memory gets erased when power is not supplied to it. Furthermore, Anderson is configured to detect if a power failure has occurred and notifies the camera system when a power failure occurs. However, Anderson does not teach the method of displaying an error message to a user informing the user that an image file has been corrupted due to power failure.

Official notice is taken that it was well known in the art at the time the invention was made to allow computerized file systems to notify users when a file was corrupted by a sudden power failure and inform the user that un-saved work was lost.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the computerized file system in Anderson to notify the camera user when a file was corrupted by a sudden power failure in order to inform the user that un-saved work was lost.

10:     As for Claim 52, Anderson depicts in Figure 1 and 3 the device comprises a digital camera.

11:     In regards to Claim 53, Anderson teaches the use of a camera system that automatically turns off the power to a digital camera when the battery voltage drops below a set value. However, Anderson does not teach that the lens on the digital camera is retracted during the shutdown sequence.

Official Notice is taken that it was well known in the art at the time the invention was made to retract the lens of a camera upon shutdown in order to prevent the lens from being damages when the camera is stored.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to retract the lens of a camera in Anderson upon shutdown in order to prevent the lens from being damages when the camera is stored.

12:     As for Claim 54, Anderson teaches on Column 6, lines 41-64, Column 7, Lines 58-67 and Column 8, Lines 1-33 the control logic comprises a shutdown bit to detect when the device has experienced a battery failure.

13:     In regards to Claim 55, Anderson teaches on Column 6, lines 41-64, Column 7, Lines 58-67 and Column 8, Lines 1-33 the control logic comprises a disable bit (PFAIL BIT) to prevent the device from being operated when the status of the battery is unfavorable.

14:     As for Claim 56, Anderson teaches on Column 6, Liens 40-64 allowing the device to

operate until a battery failure occurs, the battery failure comprising a condition in which the

battery's charge drops below a level required to operate the device. Anderson teaches on Column

6, Lines 44-48 that the predetermined threshold voltage is set to a-level incrementally higher than

the minimum operating voltage to permit shutdown of the camera. Because the camera of

Anderson ceases to work after the threshold voltage is reached, the examiner views the threshold

voltage discussed in Anderson to be the voltage level required to operate the device. Anderson

teaches on Column 7, Lines 58-67 determining, upon an attempt to restart the device after the

battery failure, that the battery has insufficient charge to support further operation of the device.

Anderson further teaches on Column 6, Lines 41-64 disabling further operation of the device

until the battery has been recharged. Anderson teaches on Column 7, Lines 58-67 and Column 8,

Lines 16 that after a power down operation has occurred, if a user attempts to turn on the camera,

the camera senses the battery voltage and determines if the voltage is sufficient and stable

enough to turn on the camera. Anderson teaches that if the voltage is not high enough, the CPU

prevents the camera from fully powering on and returns to Step (828) in Figure 8. This process

of returning to a state in which the camera looks for a wake up signal is viewed by the examiner

as a process of shutting down the device. However, Anderson does not teach that the CPU uses

residual charge recovered during a brief period between the power down operation and the

attempt to wake up the camera to perform this operation.

        Tate et al teaches in the abstract and on Column 2, Lines 17-30 That it was well known in

the art at the time the invention was made that when a load is removed from a battery, the battery

regains some voltage. Tate et al further teaches that it is advantageous to use this residual voltage
to perform operations and extend battery life.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the
invention was made to use the (after power down residual charge build up) as taught by Tate et al
to perform the process of returning to a state in which the camera looks for a wake up signal in
Anderson et al in order to extend the battery life.

15:     In regards to Claim 57, Anderson depicts in Figure 1 and 3 a device, comprising: a
battery (358); a circuit to determine a status of the battery (359); a file system (DRAM and 354);
and control logic configured to perform a shutdown sequence and prevent further operation of
the device, when the status of the battery is unfavorable (Column 6, lines 41-64), and to ensure
the integrity of the file system (prevent the loss of data) and startup the device, when the status of
the battery is favorable (Column 7, Lines 58-67 and Column 8, Lines 1-33).

16:     As for Claim 58, Anderson teaches that the image memory gets erased when power is not
supplied to it. Furthermore, Anderson is configured to detect if a power failure has occurred and
notifies the camera system when a power failure occurs. However, Anderson does not teach the
method of displaying an error message to a user informing the user that an image file has been
corrupted due to power failure.

Official notice is taken that it was well known in the art at the time the invention was
made to allow computerized file systems to notify users when a file was corrupted by a sudden
power failure and inform the user that un-saved work was lost.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the
invention was made to allow the computerized file system in Anderson to notify the camera user

when a file was corrupted by a sudden power failure in order to inform the user that un-saved

work was lost.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James M. Hannett whose telephone number is 571-272-7309.

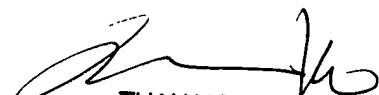The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett
Examiner
Art Unit 2612

JMH
December 23, 2005

TUAN HO
PRIMARY EXAMINER